## WHAT IS CLAIMED IS:

- 1. A method of high-frequency signal transmission between a transmitter and a receiver, comprising: linking a signal for generating a natural electromagnetic alternating field with a HF transmission signal, wherein the HF transmission signal is extracted from the linked signals in the receiver.
- 2. The method according to claim 1, wherein the step of linking comprises mixing the HF transmission signal with the signal for generating a natural alternating field.
- 3. The method according to claim 1, wherein the step of linking comprises modulating the HF transmission signal on the signal for generating a natural electromagnetic alternating field.
- 4. The method according to claim 1, wherein the step of linking comprises modulating the signal for generating a natural electromagnetic alternating field on the HF transmission signal.
- 5. The method according to claim 1, wherein the step of linking comprises inserting the signal for generating a

natural electromagnetic alternating field into gaps of the HF transmission signal.

- 6. The method according to claim 1, wherein the natural electromagnetic alternating field approximately conforms to an actual weather field.
- 7. The method according to claim 1, wherein the electromagnetic alternating field conforms to a fair-weather field.
- 8. The method according to claim 7, wherein said fair-weather field comprises at least one spectral time curve of sferics.
- 9. The method according to claim 6, further comprising adjusting the intensity of signals fixing said actual weather field according to the HF transmission signal for optimizing a reduction of electrostress.
- 10. The method according to claim 7, wherein the electromagnetic alternating field comprises at least one Schumann resonance.
- 11. The method according to claim 10, wherein the Schumann resonance comprises an intensity adjusted according

to the HF transmission signal for optimizing a reduction of electrostress.

- 12. The method according to claim 6, further comprising controlling the weather field by selective control information related to a weather situation.
- 13. The method according to claim 6, wherein signals fixing said weather field are time limited and assembled in endless signal trains.
- 14. The method according to claim 1, further comprising the step of extracting the HF transmission signal in the receiver by the signal for generating the natural electromagnetic field having a given spectral time curve stored in a memory of the receiver.
- 15. The method according to claim 14, wherein said extracting step occurs from an endless repeat spectra of sferics each being recognized in terms of time by means of time spectrum recognition in a respective repeat period.
- 16. The method according to claim 14, wherein said extracting step comprises digitally subtracting a selected signal for generating the natural electromagnetic field from a received mixed signal spectrum.

- 17. The method according to claim 1, wherein the method is applied to telecommunications, using GSM and UMTS data transmission.
- 18. The method according to claim 1, wherein the method is applied to analog and digital radio and television signal transmission and radar transmission.
- 19. The method according to claim 1, wherein the method is used for transmitting data via a wireless telephone.
- 20. The method according to claim 10, wherein the signal for generating a natural electromagnetic alternating field, and the signal for generating a Schumann resonance are emitted in the transmitter via a series of antenna elements, and received in the receiver via corresponding antenna elements, wherein the signal for generating a Schumann resonance is directly fed into a corresponding antenna transmission element.